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SCHWABE, WILLIAMSON & WYATT, P.C.
PACWEST CENTER, SUITES 1600-1900
1211 SW FIFTH AVENUE
PORTLAND, OR 97204

EXAMINER

NATNAEL, PAULO S M

ART UNIT PAPER NUMBER

2614

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5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/006,451

Applicant(s)

NAKAJIMA, SATOSHI

Examiner

Paulos M. Natnael

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-104 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-104 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims **1-5, 7-14, 16-28, 30-57, 59-65, 68-80, 82-104** are again rejected under 35 U.S.C. 102(e) as being anticipated by Van Ryzin, U.S. Pat. No. 6,127,941.

Considering claim 1, Van Ryzin discloses all claimed subject matter, note;

a) providing a remote control with a first collection of user interface displays for controlling the controllee electronic apparatus, is met by the disclosure that it is the object of the invention "to provide a remote control device with a graphical user interface for controlling audio/video devices and for obtaining additional information from a database, as requested from the remote control device, and for displaying the additional information on a display of the remote control device." (see col. 2, 19-24 and col. 6, line 27+)

b) receiving first control commands from said remote control, resulting from said provided first collection of user interface displays being used by a user of said

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remote control, is met by the disclosure "to provide a remote control device with a graphical user interface for controlling audio/video devices and for obtaining additional information from a database, as requested from the remote control device", (see col. 2, 19-24) and that "the request for detailed information may include, for example, a request for the TV listing or the VCR plus codes. The PC 136 retrieves the desired information from the database 142, 144 and transmits it to the remote control unit 100." (Col. 6, lines 27-31)

c) controlling operation of said controllee electronic apparatus in accordance with said received first control commands, is met by the disclosure that "Such information, displayed on the display 104, then becomes available to the user who may browse through the displayed TV listing, for example, or may record the program on the VCR 128 using the displayed VCR plus codes." (Col. 6, lines 31-35)

Considering claim 2, providing the remote control with a first collection of user interface displays having a plurality of display states and associated display state transition rules, is met by the disclosure that "Remote control unit 100 also includes user input section 106 including control keys for allowing the user to enter commands. Using the control keys, for example, the user can manipulate graphical representations (objects) on the display 104, that is, move the cursor up, down, right, left along the scroll-down menu, to select the desired function by clicking on the appropriate graphical object (icon), etc." (col. 3, lines 48-54; see also rejection of claim 1(a))

Considering claim 3, providing the remote control with a first collection of user interface displays having a plurality of display cells.

See rejection of claim 2.

Considering claim 4, providing the remote control with the first collection of user interface displays through a selected one of a wireless optical connection in accordance with a wireless optical communication protocol, a wireless electromagnetic connection in accordance with a wireless communication protocol, and a wired electrical connection in accordance with a wired communication protocol, is met by RF transceiver 132 or 138, Figs. 1a and 2;

Considering claim 5, wherein the first collection of user interface displays is provided to the remote control through an infrared based optical connection, using an IrDA standard based wireless optical communication protocol, is met by the disclosure that "an infrared mode of communication may be used just as well to communicate between the remote control unit 100, multimedia system and PC 136." (col. 7, lines 15-20)

Considering claim 7, wherein the first collection of user interface displays is provided to the remote control through a wired electrical connection that is a selected one of a serial connection, a parallel connection, a USB connection, and a IEEE 1394 based connection, using a message based communication protocol, is met by the disclosure

"The devices are interconnected via a serial control link which operates in the following manner. If commands are received by a particular device which are not directed thereto, this device merely passes the commands to the next device along the serial control link." (col. 4, 28-33)

Considering claim 8, receiving said first control commands from the remote control through a selected one of a wireless optical connection in accordance with a wireless optical communication protocol, a wireless eletro-magnetic connection in accordance with a wireless communication protocol and a wired electrical connection in accordance with a wired communication protocol.

See rejection of claims 4-7.

Considering claim 9, wherein said first control commands comprise control commands for controlling a plurality of operation characteristics of said controllee electronic apparatus, and said plurality of operation characteristics comprise selected ones of power on/off, channel selections, audio volume, picture brightness, and picture color, is met by the disclosure that "For example, if the user selects the TV 120, then a pull-down menu appears on the display 104 with the following functions "increase volume", "decrease volume", "increase channel by 1", "decrease channel by 1" for example. Another pull-down menu appears if more functions are selected, whereby the user may scroll through such additional menus while activating or deactivating desired operations on the TV 120." (col. 5, 44-51)

Considering claim **10**, providing said remote control with a second collection of user interface displays for controlling an auxiliary controllee electronic device coupled to said controllee electronic apparatus, is met by the disclosure that "In addition, the remote control device comprises a second transceiver for transmitting to the first transceiver a first signal corresponding to the processed command data such that at least one audio/video device is operative to perform the selected function, and for receiving from the first transceiver a second signal corresponding to status data indicating whether the selected function has been performed." (col. 2, lines 49-56)

Considering claim **11**, providing the remote control with a second collection of user interface displays having a plurality of display states and associated display state transition rules.

See rejection of claim 2;

Considering claim **12**, providing the remote control with a second collection of user interface displays having a plurality of display cells.

See rejection of claim 3.

Considering claim **13**, providing the remote control with the second collection of user interface displays through a selected one of a wireless optical connection in accordance with a wireless optical communication protocol, a wireless eletro-magnetic connection in

accordance with a wireless communication protocol, and a wired electrical connection in accordance with a wired communication protocol.

See rejection of claim 4;

Considering claim **14**, receiving from said auxiliary controllee electronic device specifications of the substantive contents of said second collection of user interface displays; and generating said second collection of user interface displays in accordance with said received specifications, is met by the disclosure that "updates from new devices may be performed via a cable connecting the remote control unit 100 to the PC 136 for downloading new specifications from some storage medium or database, as provided by the manufacturers..." (col. 7, lines 10-20)

Considering claim **16**, receiving the specifications of the substantive contents of said second collection of user interface displays from the auxiliary controllee electronic device through a selected one of a wireless optical connection in accordance with a wireless optical communication protocol, a wireless eletro-magnetic connection in accordance with a wireless communication protocol, and a wired electrical connection in accordance with a wired communication protocol.

Regarding claim 16, see rejection of claim 4.

Considering claim **17**, wherein the specifications of the substantive contents of said second collection of user interface displays are received from the auxiliary controllee

electronic device through a video connection, using a message based communication protocol embedded within a video protocol.

See rejection of claims 14 and 15.

Considering claim **18**, receiving second control commands from said remote control, resulting from said provided second collection of user interface displays being used by said user of said remote control; and controlling operation of said auxiliary controllee electronic device in accordance with said received second control commands.

See rejection of claims 4 and 16.

Considering claim **19**, receiving said second control commands from the remote control through a selected one of a wireless eletro-magnetic connection in accordance with a wireless communication protocol, a wireless eletro-magnetic connection in accordance with a wireless communication protocol, and a wired electrical connection in accordance with a wired communication protocol.

See rejection of claims 4.

Considering claim **20**, relaying the received second commands to the auxiliary controllee electronic device, is met by the disclosure that "The devices are interconnected via a serial control link which operates in the following manner. If commands are received by a particular device which are not directed thereto, this device merely passes the commands to the next device along the serial control link.

The protocol is designed in such a way that each device either responds to the commands or passes them through. Similarly, when a particular device sends information via the serial control link, other devices simply function as pass-through components. (col. 4, lines 28-33)

Considering claim **21**, relaying the received second control commands through a selected one of a wireless optical connection in accordance with a wireless optical communication protocol, a wireless eletro-magnetic connection in accordance with a wireless communication protocol, and a wired electrical connection in accordance with a wired communication protocol.

See rejection of claim 4.

Considering claim **22**, wherein said auxiliary controllee electronic device is a selected one of a videocassette recorder (VCR), a digital versatile disk (DVD) 3 player, a home theatre audio control unit, and a video camera, is met by VCR 128, DAT 126, or DVD 124, Figs. 1a and 2.

Considering claim **23**, control commands for controlling a plurality of operation characteristics of said auxiliary controllee electronic device, and said plurality of operation characteristics comprise selected ones of power on/off, play, fast forward, reverse, pause, stop, audio volume, picture brightness, and picture color.

See rejection of claim 9.

Considering claim **24**, the method of claim 1, wherein said controllee electronic apparatus is a TV, is met by TV 120, Figs. 1a and 2;

Considering claim **25**, the method of claim 1, wherein said controllee electronic apparatus is a selected one of a set top box, a DVD player, a VCR, is met by DVD 124, figs. 1a and 2;

Considering claim **26**, providing specifications for a collection of user interface displays for controlling the auxiliary controllee electronic device to the primary controllee electronic device for the primary controllee electronic device to generate and provide the collection of user interface displays to a remote control; receiving control commands from said remote control, resulting from said provided collection of user interface displays being used by a user of said remote control; and controlling operation of said auxiliary controllee electronic device in accordance with said received control commands.

Regarding claim 26, see rejection of claim 1.

Considering claim **27**, providing specifications for a collection of user interface displays having a plurality of display states and associated display state transition rules.

See rejection of claim 2.

Considering claim **28**, providing specifications for a collection of user interface displays having a plurality of display cells.

See rejection of claim 3.

Considering claim **30**, providing the specifications of the collection of user interface displays from the auxiliary controllee electronic device to the primary controllee electronic device through a selected one of a wireless optical connection in accordance with a wireless optical communication protocol, a wireless eletro7 magnetic connection in accordance with a wireless communication protocol, a wired electrical connection in accordance with a wired communication protocol.

See rejection of claim 4.

Considering claim **31**, wherein the specifications for the collection of user interface displays are provided from the auxiliary controllee electronic device to the primary controllee electronic device through a video connection, using a message based communication protocol embedded within a video protocol.

See rejection of claim 17.

Considering claim **32**, receiving the control commands directly from the remote control through a selected one of a wireless optical connection in accordance with a wireless optical communication protocol, a wireless eletro-magnetic connection in accordance

with a wireless communication protocol, and a wired electrical connection in accordance with a wired communication protocol.

See rejection of claim 4.

Considering claim **33**, receiving the control commands indirectly via said primary controllee electronic device through a selected one of a wireless optical connection in accordance with a wireless optical communication protocol, a wireless eletro-magnetic connection in accordance with a wireless communication protocol, and a wired electrical connection in accordance with a wired communication protocol.

See rejection of claim 4.

Considering claim **34**, wherein said auxiliary controllee electronic device is a selected one of a videocassette recorder (VCR), a digital versatile disk (DVD) player, a home theatre audio control unit, and a video camera, is met by DVD 124, Figs. 1a and 2.

Considering claim **35**, control commands for controlling a plurality of operation characteristics of said auxiliary controllee electronic device, and said plurality of operation characteristics comprise selected ones of power on/off, play, fast forward, reverse, pause, stop, audio volume, picture brightness, and picture color.

See rejection of claim 9.

Considering claim **36**, wherein said primary controllee electronic device is a TV, is met by TV 120, figs. 1a and 2;

Considering claim **37**, the method of claim 26, wherein said primary controllee electronic device is a selected one of a set top box, a DVD player and VCR player, is met by DVD 124, figs. 1A and 2.

Considering claim **38**, receiving from a primary controllee electronic device a first collection of user interface displays for controlling a primary controllee electronic device; facilitating usage of the first collection of user interface displays by a user to control the primary controllee electronic device; and providing first control commands to the primary controllee electronic device 7 to control the primary controllee electronic device in response to said usage of the 8 first collection of user interface displays.

As for Claim 38, see rejection of claim 1;

Considering claim **39**, receiving a first collection of user interface displays having a plurality of display states and associated display state transition rules.

See rejection of claim 27.

Considering claim **40**, receiving a first collection of user interface displays having a plurality of display cells.

See rejection of claim 28.

Considering claim **41**, receiving the first collection of user interface displays to control the primary controllee electronic device through a selected one of a wireless optical connection in accordance with a wireless optical communication protocol, a wireless eletro-magnetic connection in accordance with a wireless communication protocol, a wired electrical connection in accordance with a wired communication protocol.

See rejection of claim 30.

Considering claim **42**, providing the first control commands to the primary controllee electronic device through a selected one of a wireless optical connection in accordance with a wireless optical communication protocol, a wireless eletro-magnetic connection in accordance with a wireless communication protocol, a wired electrical connection in accordance with a wired communication protocol.

See rejection of claim 30.

Considering claim **43**, control commands for controlling a plurality of operation characteristics of said primary controllee electronic device, and said plurality of operation characteristics comprise selected ones of power on/off, channel selections, audio volume, picture brightness, and picture color.

See rejection of claim 9 and 35.

Considering claim **44**, receiving a second collection of user interface displays from the primary controllee electronic device for controlling an auxiliary controllee electronic device coupled to the primary controllee electronic device; facilitating usage of the second collection of user interface displays by a user to remotely control the auxiliary controllee electronic device; and providing second control commands either directly or indirectly to the auxiliary controllee electronic device to control the auxiliary controllee electronic device in response to said usage of the second collection of user interface displays.

See rejection of claim 16.

Considering claim **45**, providing a second collection of user interface displays having a plurality of display states and associated display state transition rules.

See rejection of claim 2;

Considering g claim **46**, providing a second collection of user interface displays having a plurality of display cells.

See rejection of claim 3.

Considering claim **47**, providing the second collection of user interface displays from the primary controllee electronic device to the remote control through a selected one of a wireless optical connection in accordance with a wireless optical communication protocol, a wireless eletro-magnetic connection in accordance with a wireless

communication protocol, a wired electrical connection in accordance with a wired communication protocol.

See rejection of claim 4.

Considering claim **48**, providing the second control commands through a selected one of a wireless optical connection in accordance with a wireless optical communication protocol, a wireless eletro-magnetic connection in accordance with a wireless communication protocol, and a wired electrical connection in accordance with a wired communication protocol.

See rejection of claim 4.

Considering claim 49, the method of claim 44, wherein said auxiliary controllee electronic device 2 is a selected one of a videocassette recorder (VCR), a digital versatile disk (DVD) 3 player, a home theatre audio control unit, and a video camera.

See rejection of claim 22.

Considering claim **50**, the method of claim 49, wherein said second control commands comprise control commands for controlling a plurality of operation characteristics of said auxiliary controllee electronic device, and said plurality of operation characteristics comprise selected ones of power on/off, play, fast forward, reverse, pause, stop, audio volume, picture brightness, and picture color.

See rejection of claim 9.

Considering claim **51**, the method of claim 38, wherein said primary controllee electronic device is a TV.

See rejection of claim 22.

Considering claim **52**, the method of claim 38, wherein said primary controllee electronic device is a selected one of a set top box, a DVD player and a VCR player.

See rejection of claim 25.

Considering claim **53**,

a) first means to provide a remote control with a first collection of user interface displays for controlling the controllee electronic apparatus, and to receive first control commands from said remote control, resulting from said provided first collection of user interface displays being used by a user of said remote control, is met by PC 136, figs. 1A and 2;
b) second means to control operation of said controllee electronic apparatus in accordance with said received first control commands, is met by Remote Control 100, figs. 1A and 2; (See also rejection of claim 1)

Considering claim **54**, wherein said first means provides the remote control with a first collection of user interface displays having a plurality of display states and associated display state transition rules.

See rejection of claim 2.

Considering claim **55**, the apparatus of claim 53, wherein said first means provides the remote control with a first collection of user interface displays having a plurality of display cells.

See rejection of claim 3;

Considering claim **56**, wherein said first means provides the remote control with the first collection of user interface displays through a selected one of a wireless optical connection in accordance with a wireless optical communication protocol, a wireless eletro-magnetic connection in accordance with a wireless communication protocol, and a wired electrical connection in accordance with a wired communication protocol.

See rejection of claim 4.

Considering claim **57**, wherein said first means provides the remote control with the first collection of user interface displays through an infrared based optical connection, using an IrDA standard based wireless optical communication protocol.

See rejection of claim 5.

Considering claim 59, wherein said first means provides the remote control with the first collection of user interface displays through a wired electrical connection that is a selected one of a serial connection, a parallel connection, a USB connection, and a IEEE 1394 based connection, using a message based communication protocol.

See rejection of claim 7.

Considering claim **60**, wherein said first means receives said first control commands from the remote control through a selected one of a wireless optical connection in accordance with a wireless optical communication protocol, a wireless eletro-magnetic connection in accordance with a wireless communication protocol and a wired electrical connection in accordance with a wired communication protocol.

See rejection of claim 8.

Considering claim **61**, wherein said first control commands comprise control commands for controlling a plurality of operation characteristics of said controllee electronic apparatus, and said plurality of operation characteristics comprise selected ones of power on/off, channel selections, audio volume, picture brightness, and picture color.

See rejection of claim 9.

Considering claim **62**, wherein said first means further provides said remote control with a second collection of user interface displays for controlling an auxiliary controllee electronic device coupled to said controllee electronic apparatus.

See rejection of claim 10;

Considering claim **63**, wherein said first means provides the remote control with a second collection of user interface displays having a plurality of display states and associated display state transition rules.

See rejection of claims 2 and 10;

Considering claim **64**, wherein said first means provides the remote control with a second collection of user interface displays having a plurality of display cells.

See rejection of claims 3 and 10.

Considering claim **65**, wherein said first means provides the remote control with the second collection of user interface displays through a selected one of a wireless optical connection in accordance with a wireless optical communication protocol, a wireless eletro-magnetic connection in accordance with a wireless communication protocol, and a wired electrical connection in accordance with a wired communication protocol.

See rejection of claim 4;

Considering claim **68**, wherein said third means receives the specifications from the auxiliary controllee electronic device through a selected one of a wireless optical connection in accordance with a wireless optical communication protocol, a wireless eletro-magnetic connection in accordance with a wireless communication protocol, and a wired electrical connection in accordance with a wired communication protocol.

See rejection of claim 4.

Considering claim **69**, wherein said third means receives the specifications from the auxiliary controllee electronic device through a video connection, using a message based communication protocol embedded within a video protocol.

See rejection of claim 17.

Considering claim **70**, wherein said first means further receives second control Commands from said remote control, resulting from said provided second collection of user interface displays being used by said user of said remote control; and said second and third means further cooperate to control operation of said auxiliary controllee electronic device in accordance with said received second control commands.

See rejection of claim 16.

Considering claim **71**, wherein said third means receives said second control commands from the remote control through a selected one of a wireless electro magnetic connection in accordance with a wireless communication protocol, a wireless eletro-magnetic connection in accordance with a wireless communication protocol, and a wired electrical connection in accordance with a wired communication protocol.

See rejection of claim 4.

Considering claim **72**, wherein said second and third means cooperate to relay the received second commands to the auxiliary controllee electronic device.

See rejection of claim 20.

Considering g claim 73, wherein said second and third means cooperate to relay the received second control commands through a selected one of a wireless optical connection in accordance with a wireless optical communication protocol, a wireless eletro-magnetic connection in accordance with a wireless communication protocol, and a wired electrical connection in accordance with a wired communication protocol.

See rejection of claim 4;

Considering claim 74, wherein said auxiliary controllee electronic device is a selected one of a videocassette recorder (VCR), a digital versatile disk (DVD) player, a home theatre audio control unit, and a video camera.

See rejection of claim 22.

Considering claim 75, wherein said second control commands comprise control commands for controlling a plurality of operation characteristics of said auxiliary controllee electronic device, and said plurality of operation characteristics comprise selected ones of power on/off, play, fast forward, reverse, pause, stop, audio volume, picture brightness, and picture color.

See rejection of claim 9.

Considering claim 76, wherein said controllee electronic apparatus is a 2 TV, is met by TV 120, figs. 1a and 2;

Considering claim 77, wherein said controllee electronic apparatus is a selected one of a set top box, a DVD player, a VCR.

See rejection of claim 25;

Considering claim 78, first means to provide specifications for a collection of user interface displays for controlling the auxiliary controllee electronic device to a primary controllee electronic device for the primary controllee electronic device to generate and provide the collection of user interface displays to a remote control; second means to receive control commands from said remote control, resulting from said provided collection of user interface displays being used by a user of said remote control; and third means to control operation of said auxiliary controllee electronic device in accordance with said received control commands.

Regarding claim 78, see rejection of claims 1 and 53.

Considering claim 79, wherein said first means provides to said primary controllee electronic apparatus, specifications for a collection of user interface displays having a plurality of display states and associated display state transition rules.

See rejection of claim 2;

Considering claim **80**, wherein said first means provides to said primary controllee apparatus, specifications for a collection of user interface displays having a plurality of display cells.

See rejection of claim 3;

Considering claim **82**, wherein said first means provides the specifications of its collection of user interface displays to the primary controllee electronic device through a selected one of a wireless optical connection in accordance with a wireless optical communication protocol, a wireless eletro magnetic connection in accordance with a wireless communication protocol, a wired electrical connection in accordance with a wired communication protocol.

See rejection of claim 4.

Considering claim **83**, wherein said first means provides the specifications for its collection of user interface displays to the primary controllee electronic device through a video connection, using a message based communication protocol embedded within a video protocol.

See rejection of claim 17.

Considering claim **84**, wherein said second means receives the control commands directly from the remote control through a selected one of a wireless optical connection in accordance with a wireless optical communication protocol, a wireless eletro-

magnetic connection in accordance with a wireless communication protocol, and a wired electrical connection in accordance with a wired communication protocol.

See rejection of claim 4.

Considering claim **85**, wherein said second means receives the control commands indirectly via said primary controllee electronic device through a selected one of a wireless optical connection in accordance with a wireless optical communication protocol, a wireless eletro-magnetic connection in accordance with a wireless communication protocol, and a wired electrical connection in 6 accordance with a wired communication protocol.

See rejection of claim 4.

Considering claim **86**, the apparatus of claim 78, wherein said apparatus is a selected one of a videocassette recorder (VCR), a digital versatile disk (DVD) player, a home theatre audio control unit, and a video camera.

See rejection of claim 22;

Considering claim **87**, control commands for controlling a plurality of operation characteristics of said auxiliary controllee electronic apparatus, and said plurality of operation characteristics comprise selected ones of power on/off, play, fast forward, reverse, pause, stop, audio volume, picture brightness, and picture color.

See rejection of claim 9.

Considering claim **88**, wherein said primary controllee electronic device is a TV.

See rejection of claim 24.

Considering claim **89**, wherein said primary controllee electronic device is a selected one of a set top box, a DVD player and VCR player.

See rejection of claim 22 or 25;

Considering claim **90**, first means to receive from a primary controllee electronic device a first collection of user interface displays for controlling a primary controllee electronic device; second means to facilitate usage of the first collection of user interface displays by a user to control the primary controllee electronic device; and third means to provide first control commands to the primary controllee electronic device to control the primary controllee electronic device in response to said usage of the first collection of user interface displays.

See rejection of claim 1;

Considering claim **91**, the apparatus of claim 90, wherein said first means receives from the primary controllee electronic device a first collection of user interface displays having a plurality of display states and associated display state transition rules.

See rejection of claim 2;

Considering claim **92**, the apparatus of claim 90, wherein said first means receives from the primary controllee electronic device a first collection of user interface displays having a plurality of display cells.

See rejection of claim 3;

Considering claim **93**, wherein said first means receives the first collection of user interface displays from the primary controllee electronic device through a selected one of a wireless optical connection in accordance with a wireless optical communication protocol, a wireless eletro-magnetic connection in accordance with a wireless communication protocol, a wired electrical connection in accordance with a wired communication protocol.

See rejection of claim 4;

Considering claim **94**, wherein said third means provides the first control commands to the primary controllee electronic device through a selected one of a wireless optical connection in accordance with a wireless optical communication protocol, a wireless eletro-magnetic connection in accordance with a wireless communication protocol, a wired electrical connection in accordance with a wired communication protocol.

See rejection of claim 4;

Considering claim **95**, wherein said first control commands comprise control commands for controlling a plurality of operation characteristics of said primary controllee electronic

device, and said plurality of operation characteristics comprise selected ones of power on/off, channel selections, audio volume, picture brightness, and picture color.

See rejection of claim 9;

Considering claim **96**, wherein said first means further receives a second collection of user interface displays from the primary controllee electronic device for controlling an auxiliary controllee electronic device coupled to the primary controllee electronic device; said second means further facilitates usage of the second collection of user interface displays by a user to remotely control the auxiliary controllee electronic device; and said third means further provides second control commands either directly or indirectly to the auxiliary controllee electronic device to control the auxiliary controllee electronic device in response to said usage of the second collection of user interface displays.

See rejection of claim 1;

Considering claim **97**, wherein said first means receives from the primary controllee electronic apparatus a second collection of user interface displays having a plurality of display states and associated display state transition rules.

See rejection of claim 2;

Considering claim **98**, wherein said first means receives from the primary controllee electronic apparatus a second collection of user interface displays having a plurality of display cells.

See rejection of claim 3;

Considering claim **99**, wherein said first means receives said second collection of user interface displays from the primary controllee electronic device through a selected one of a wireless optical connection in accordance with a wireless optical communication protocol, a wireless eletro-magnetic connection in accordance with a wireless communication protocol, a wired electrical connection in accordance with a wired communication protocol.

See rejection of claim 4.

Considering claim **100**, wherein said third means provides the second control commands through a selected one of a wireless optical connection in accordance with a wireless optical communication protocol, a wireless eletro-magnetic connection in accordance with a wireless communication protocol, and a wired electrical connection in accordance with a wired communication protocol.

See rejection of claim 5;

Considering claim **101**, wherein said auxiliary controllee electronic device is a selected one of a videocassette recorder (VCR), a digital versatile disk (DVD) player, a home theatre audio control unit, and a video camera.

See rejection of claim 22;

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Considering claim **102**, wherein said second control commands comprise control commands for controlling a plurality of operation characteristics of said auxiliary controllee electronic device, and said plurality of operation characteristics comprise selected ones of power on/off, play, fast forward, reverse, pause, stop, audio volume, picture brightness, and picture color.

See rejection of claim 9;

Considering claim **103**, wherein said primary controllee electronic device is a TV.

See rejection of claim 24;

Considering claim **104**, wherein said primary controllee electronic device is a selected one of a set top box, a DVD player and a VCR player.

See rejection of claim 25.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims **6,15, 29, 58, 66, 67, 81** are again rejected under 35 U.S.C. 103(a) as being unpatentable over Van Ryzin.

Considering claim **6**, the method of claim 4, wherein the first collection of user interface displays is provided to the remote control through a wireless eletro-magnetic communication connection, using a selected one of a Bluetooth and an IEEE 802.11 standard based wireless communication protocol.

Regarding claim 6, Van Ryzin does not specifically disclose Bluetooth and an IEEE 802.11 standard based wireless communication protocol. Van Ryzin however, discloses that different types of communication protocol may be used. Nevertheless, the Examiner takes Official Notice in that the IEEE 802.11 standard is well-known in the art and, therefore, it would have been obvious to the skilled in the art at the time the invention was made to modify the system of Van Ryzin to provide the advantage of using another type of communication protocol so that the system is made versatile and more useful to the user.

Considering claim **15**, the method of claim 14, wherein said receiving of specifications of the substantive contents of said second collection of user interface displays comprises receiving from said auxiliary controllee electronic device an XML based specification.

Regarding claim 15, Van Ryzin does not specifically disclose XML based specification. Van Ryzin discloses "updates from new devices may be performed via a cable connecting the remote control unit 100 to the PC 136 for downloading new

specifications from some storage medium or database, as provided by the manufacturers..." (col. 7, lines 10-20)

However, the Examiner here takes Official Notice in that the extensible markup language (XML) is well-known in the art and, therefore, it would have been obvious to the skilled in the art at the time the invention was made to modify the system of Van Ryzin by providing the XML standard in order to make it easier to create a better graphical user interface.

Considering claim **29**, the method of claim 26, wherein said providing of specifications for a collection of user interface displays for controlling the auxiliary controllee electronic device comprises providing an XML based specification specifying the substantive contents of the collection of user interface displays.

See rejection of claim 15.

Considering claim **58**, the apparatus of claim 56, wherein said first means provides the remote control with the first collection of user interface displays through a wireless eletro magnetic communication connection, using a selected one of a Bluetooth and an IEEE 802.11 standard based wireless communication protocol

See rejection of claim 6.

Considering claim **66**, the apparatus of claim 62, further comprising third means to receive from said auxiliary controllee electronic device specifications of the substantive

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contents of said second collection of user interface displays; and fourth means to generate said second collection of user interface displays in accordance with said received specifications.

See rejection of claim 15.

Considering claim **67**, the apparatus of claim 66, wherein said third means receives from said auxiliary controllee electronic device an XML based specification.

See rejection of claim 6.

Considering claim **81**, the apparatus of claim 78, wherein said first means provides to said primary controllee electronic apparatus, an XML based specification specifying the substantive contents of the collection of user interface displays.

See rejection of claim 6.

Response to Arguments

5. Applicant's arguments filed Dec 11, 2003 have been fully considered but they are not persuasive. Response follows.

Applicant's arguments

a) the portions of Van Ryzin cited by the Office teach a software cartridge attached to the remote control contains specifications for controlling operating the controllee

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devices (see Van Ryzin, column 3 lines 55-61)

b) The remote control devices as taught by Van Ryzin does not receive specification data from the controlled device but instead receives such data from the cartridge 110. Therefore if a new controlled device is attached to the system, unless specification data is received from the new cartridge 10 or data is received from a PC, neither of which is a controlled device 9, the graphical representation of the newly attached controlled device cannot be displayed on the control device of Van Ryzin. Consequently, Van Ryzin does not teach or suggest a controllee device...because Van Ryzin receives specification data for a controllee device from the cartridge 110 or a PC.

Examiner Response

a) The passages cited in the Office Action discloses that first one of the objects of the invention ““to provide a remote control device with a graphical user interface for controlling audio/video devices and for obtaining additional information from a database, as requested from the remote control device, and for displaying the additional information on a display of the remote control device.” (see col. 2, 19-24 and col. 6, line And that “the request for detailed information may include, for example, a request for the TV listing or the VCR plus codes. The PC 136 retrieves the desired information from the database 142, 144 and transmits it to the remote control unit 100.” (Col. 6, lines 27-31) Furthermore, Van Ryzin discloses, “Such information, displayed on the display 104, then becomes available to the user who may browse through the displayed

TV listing, for example, or may record the program on the VCR 128 using the displayed VCR plus codes.” (Col. 6, lines 31-35) At least in those passages the cited teaching is not merely about a software cartridge attached to the remote control containing specifications for controlling operating the controllee devices.

b) In the second embodiment of the Van Ryzin reference, the PC functions as a controllee device. That is because the remote controller sends a request for information to the PC and the PC responds. Van Ryzin specifically discloses “A personal computer 136 (PC) is connected to a transceiver 138 with an antenna 140 substantially identical in operation and design to the transceivers 116, 132 and antennas 102, 134. The PC 136 has access either to a remote (the Internet 142) or local (CD-ROM 144) database containing, for example, title/track names of CDs, minidisks, etc. Alternatively, or in addition, the database may contain TV listing or VCR plus codes, that is codes for recording TV programs. Access to the Internet 142 is provided via a modem or network card attached to the PC 136 and an Internet Service Provider, as known to those skilled in the art. The remote control unit 100 of FIG. 2 has one of its control keys labeled “Detailed Info”. Alternatively, the operation of this key may be incorporated into the graphical interface and displayed on the display 104 for activation via the cursor. When the “Detailed Info” operation is initiated, the remote control unit 100 under control of the microprocessor 112 sends a request for detailed information via the transceiver 116 to the PC 136. The request, as represented by the information carrying signals, is received by the antenna 140 and is processed by the transceiver 138. Following the processing

by the transceiver 138, the request is supplied to the PC 136. The request for detailed information may include, for example, a request for the TV listing or the VCR plus codes. The PC 136 retrieves the desired information from the database 142, 144 and transmits it to the remote control unit 100....[emphasis added] (see col. 6, lines 4-31)

Thus, Van Ryzin discloses the remote controller that is capable of accessing a PC (a controllee device) and the PC retrieving the requested information and transmitting it to the remote controller. The passage cited by the Applicant, therefore, is one embodiment. The other embodiment of the reference of Van Ryzin as quoted above teaches that the remote controller requesting information from the PC 136 and the latter retrieving the requested information from a data base, the Internet and the like, and transmitting the requested data to the remote controller. Thus, the argument that Van Ryzin does not disclose a controllee device... because Van Ryzin receives specification data for a controllee device from the cartridge 110 or a PC, is unpersuasive, because as shown in the explanation given above, Van Ryzin discloses the second embodiment of Fig.2.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paulos M. Natnael whose telephone number is (703) 305-0019. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (703) 305-4795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Paulos Natnael 
February 21, 2004


MICHAEL H. LEE
PRIMARY EXAMINER